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June 2019 Edition

June Meeting Minutes

*Meeting notes this month courtesy of
Jeremy Mooney, KC0LDI*

Russ Ramirez, K0WFS, called the meeting to order at 1 PM.

- The May 2019 Minutes were approved.

Old Business:

Russ, K0WFS, talked about the Hamvention. He ran into Allan, W0ONLY, there. The new location is more outdoors and subject to weather. The old location was hit by tornado and is likely to be torn down. Allan mentioned a kit building presentation that gave credit to Mert and Craig regarding a 4 states kit.

Highlights from the convention included the new Elecraft K4, SDR. Hans was there, but didn't get a chance to talk with him

There was Free admission on Sunday. Russ noted that the convention didn't seem as well attended overall.

New Business:

Dan K, KC0QHZ, asked about field day. He will likely go to SPRC at Benson airport

John, KJ0P, mentioned Rob has often had something planned at his place.

Russ talked about next build-a-thon in August. He has 2 kits in mind. One will likely be a power meter

Don asked about parts sources. Russ said Mouser or Digikey, mostly Digikey due to being local.

There was some discussion about sourcing parts from eBay and non-US sources.

Show and Tell:

Bob, WB0POQ, brought in a project he has been working on. He relayed his experience of building it and what he forget when he put it away for a while

He noted the pain of assembling/aligning certain parts and how the placement of parts often makes it harder to install others.

There was some discussion of why he added a speaker (listen to beat in addition to/rather than watching meter).



John, KJ0P mentioned that WA0KCO has 1000' of LM400 knockoff cable. He acquired some and shared the specs. John mentioned me obtained a Dremel kit at harbor freight. It has many parts including a step bit. It is nice to have stops vs a taper.

John also obtained some Germanium diodes at Axman. He shared how he tracked down the specs, (found mil stock number on box).

He plans to use them in conjunction with a field strength meter kit for experimenting and learning.



SHIREEN		RFC-400 50 Ohms Coaxial Cable	
CONSTRUCTION		PROPERTIES	
Inner Conductor	24.4 mm	Min. Bending Radius	24.4 mm
Insulation	740 M	Max. Pulling Tension	18.2 kgf/m
Outer Conductor	1.0 mm	Dielectric Constant (at cable 3-met or 700)	< 1.5
Jacket	1.0 mm	Admittance Ambient Temperature	-40 to +85 °C
PHYSICAL SPECIFICATIONS		ELECTRICAL CHARACTERISTICS	
Center Conductor	24.4 mm	Characteristic Impedance	50 ± 0.5 ohms
Conductor Dia. (±0.05mm)	2.74	Capacitance	18 pF/m
Min. Braid Strength (N)	6.0	Velocity Ratio	> 85 %
Insulation	740 M	DC Resistance - Center Conductor	< 4.80 ohms/m
Insulation Dia. (±0.10mm)	7.62	DC Resistance - Outer Conductor	< 5.40 ohms/m
Color	Black	Peak Power Rating	10.00 kW
Conductor (N)	1.0 mm	Cut Off Frequency	10.00 GHz
Adhesive	1.0 mm	Insulation Resistance	> 5.000 MΩ/m
1st Outer Conductor	24.4 mm	Dielectric Strength	1500 VAC
Shielding	> 100%	Voltage Withstand	2500 VDC
Dielectric	7.36	Screening Factor at 1-1000MHz	> 95 dB
2nd Outer Conductor	24.4 mm	Frequency	10 MHz
Conductor Dia. (±0.05mm)	2.74	Attenuation (at 20 °C)	0.87 dB/100m
Dielectric	7.36	100 MHz	0.88 dB/100m
Outer Jacket	1.0 mm	100 MHz	1.21 dB/100m
Outer Dia. (±0.10mm)	7.62	100 MHz	1.52 dB/100m
Tensile Strength	> 16.0 N/mm ²	100 MHz	1.88 dB/100m
Dielectric at break	> 100%	100 MHz	2.21 dB/100m
Adhesive	1.0 mm	100 MHz	2.50 dB/100m
Printing	1.0 mm	100 MHz	2.81 dB/100m
Shireen RFC-400 50 Ohms Coaxial Cable every	2000 m	100 MHz	3.12 dB/100m
> 1000 m	2000 m	100 MHz	3.43 dB/100m
> 1000 m	2000 m	100 MHz	3.75 dB/100m
> 1000 m	2000 m	100 MHz	4.06 dB/100m



Mike, KD0JXE, discussed his experiences winding toroids and the difference between powered iron and ferrite. Often people specify a specific core, but never why they picked that particular one.

Mike did some profiling to better understand, and shared some of his findings.

Russ added some additional information to the discussion. There is a book by

Doug DeMaw - Ferromagnetic-Core Design and Application Handbook. There is also a useful web site at: toroids.info

Chuck, KA8HDE, brought books and a board to share.

Russ, K0WFS, brought wagos, and compared the push vs lever, and talked about use in testing on the bench.

Tim, WD9IGX, asked for input regarding DDS and using it to test receivers.

Club Officers:

President: Russ Ramirez/K0WFS
Vice Pres: Jeremy Mooney/KC0LDI
Secretary: Steve Ulrich/NW0C
Treasurer: Paul Bushouse/N0TYE
At Large: Bob Liesenfeld/WB0POQ

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